NAD 512

Compact Disc Player

- **MASH Digital to Analogue converter.**
- **Digital Output**
- **DC coupled output**
- **Low output impedance**
- **Separate power regulators for analogue and digital sections**
- **Remote control with direct track access**
- **NAD-Link**
- **Program (21 tracks), Repeat and Random functions**

Over the years NAD has built up an enviable reputation for building fine CD players offering outstanding value for money. Developed from the highly acclaimed and award winning NAD Model 502, the latest model, the NAD 512 will further enhance that reputation.
As always, sonic performance is the first priority at NAD. Rather than adding many seldom used features or going for "overkill" on a single aspect of the design, the NAD engineers have concentrated on the design itself to offer the best performance possible at the price. Behind the deceptively modest front panel lies sophisticated circuitry.

Features and Circuitry

Up to 21 tracks can be programmed in any sequence in the NAD's 512 memory, both from the front panel and the supplied remote control. Repeat of the entire disc as well as any pre-selected track or the programmed disc adds to the flexibility. The display incorporates a new "calendar" type, which gives instant information on the number of tracks, time remaining or elapsed, and the track currently being played. The RANDOM function will play the whole disc in random order.

Not all digital outputs are the same. In the case of the NAD 512 careful attention has been paid so that best use can be made of the ever increasing number of products becoming available with digital inputs (DAT, DCC, MD recorders, outboard D to A converters, etc.). The output is buffered and isolated by a transformer from the converter itself and the output impedance has been carefully tailored to produce a precise 75 impedance to ensure perfect matching. With the use of correct cables effects such as reflections, overshoot and spurious signals will be eliminated the from NAD 512's digital output.
With advances in DAC technology coming so rapidly there is a tendency for manufacturers to copy the "application notes" circuitry supplied with the Digital to Analogue converter chips. The end result is a series of CD players of various brands differing only in the number of seldom used features bolted on. This is not the case with NAD CD players.

For the NAD 512 a MASH Digital-to-Analogue single bit converter chip was chosen for its excellent low level linearity. Instead of using a 4-pole filter in the analogue stage as is the norm with almost all other CD players utilising a MASH D to A, a 5 pole filter is used, removing spurious RF interference more effectively and keeping the audio band totally clean. Metal film resistors and polypropylene capacitors are used in key areas to ensure a highly accurate frequency response. Capacitors are not used in the signal path at the output (as this can degrade the sound quality).
The output impedance is very low at 120 , making the NAD 512 less sensitive to cables or the ancillary equipment it is partnered with. The output itself is DC coupled (no capacitors are present in the audio path). Any DC offset is canceled by servo circuitry constantly monitoring the output for any DC offset and re-regulating it back to zero if necessary.

Anyone interested in a high performance CD player without frills should put the NAD 512 at the top of their shortlist.

NAD

SPECIFICATIONS - NAD 512

Disc capacity		Single disc 120mm or 80mm
Programming capability		21 Tracks
Digital-to-Analogue conversion		MASH, 18 bit resolution
Digital filter		18 bit 4 x oversampled
Analogue filter		5 pole active
Frequency response 5Hz-20kHz		±0.5dB
De-emphasis error		±0.3dB
THD (at odB, 1kHz)		0.0025%
Dynamic range		98dB
Linearity		+0.5dB; 0 to -90dB
Signal to noise ratio, A-weighted	de-emphasis on	100dB
	de-emphasis off	110dB
Channel separation	@ 1kHz	>110dB
	@ 10kHz	>80dB
Wow and Flutter		Unmeasurable (Quartz accuracy)
Output impedance		120
Output level @ 0dB		2.0V rms
Digital error correction		CIRC with double error correction in C1 and C2
Digital code output		Sony/Philips serial data format
Remote control		yes

PHYSICAL SPECIFICATIONS

Dimensions (W x H x D)	435 x 90 x 260 mm
Net weight	4.1kg
Shipping weight	4.9kg

NOTE: NAD resrves the right to change specifications or design at any time without notice. All specifications sre those in effect at time of printing.
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